ORDER NO. GAD8606576C2

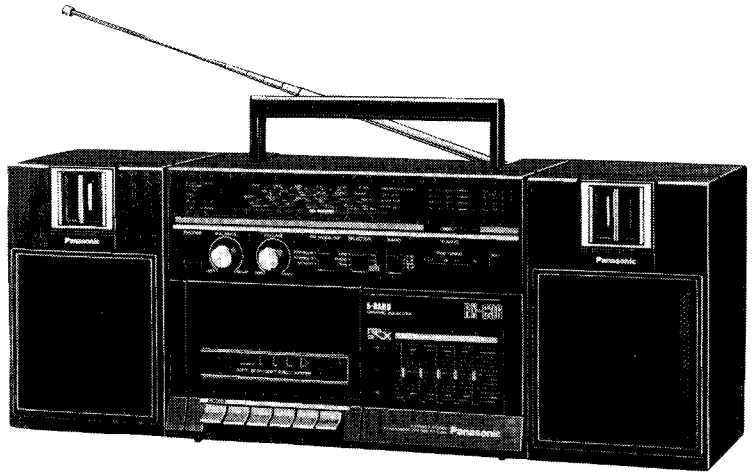
Service Manual

Radio Cassette

RX-C36L

(Black)
(Silver)

Portable Stereo Component System



This is the Service Manual for the following areas.

- [Z] ··· For all European areas except [E] [F] [I] [G].
- [E] ··· For United Kingdom.
- [F] ··· For France.
- [I] ··· For Italy and Finland.
- [G] ··· For F.R. Germany.

Color Variation

Areas	Color
[Z] [F] [I] [G]	Black, Silver
[E]	Black

RX-CW30 MECHANISM SERIES

■ SPECIFICATIONS

General:

Power Requirement:	[Z] [F] [I] [G]...AC; 220V, 50Hz [E]...AC; 240V, 50Hz Battery; 9V (Six "D" Size Flashlight Batteries) (Panasonic UM-1 or equivalent) Car battery; with optional car adaptor RP-917
Power Consumption:	15W (AC only)
Power Output:	10W (5W×2)...MPO 8W (4W×2)...RMS (max.)
Speaker:	Woofer; 12cm PM Dynamic Speaker (3Ω) Tweeter; 2cm×4cm Ceramic Speaker (300Ω)
Input:	LINE IN; sensitivity 280mV/47kΩ over DC IN; 9V
Output:	EXT SP; 3~8Ω HEADPHONES; 32Ω, φ3.5
Dimensions:	Total Size 510(W)×194(H)×155(D)mm Main Unit 267(W)×194(H)×155(D)mm Speaker Box 125(W)×194(H)×134(D)mm
Weight:	3.2kg without batteries

Radio Section:

Radio Frequency Range:	FM; 87.5~108MHz LW; 148.5~285kHz MW; 520~1610kHz SW; 5.9~18MHz
Intermediate Frequency:	FM; 10.7MHz [Z] [F] [I] [G]...AM (LW/MW/SW) 455kHz [E]...AM (LW/MW/SW) 470kHz
Sensitivity:	FM; 1.8μV/50mW output (−3dB Limit Sens) LW; 141μV/m/50mW output MW; 79μV/m/50mW output SW; 4μV/50mW output

Tape Deck Section:

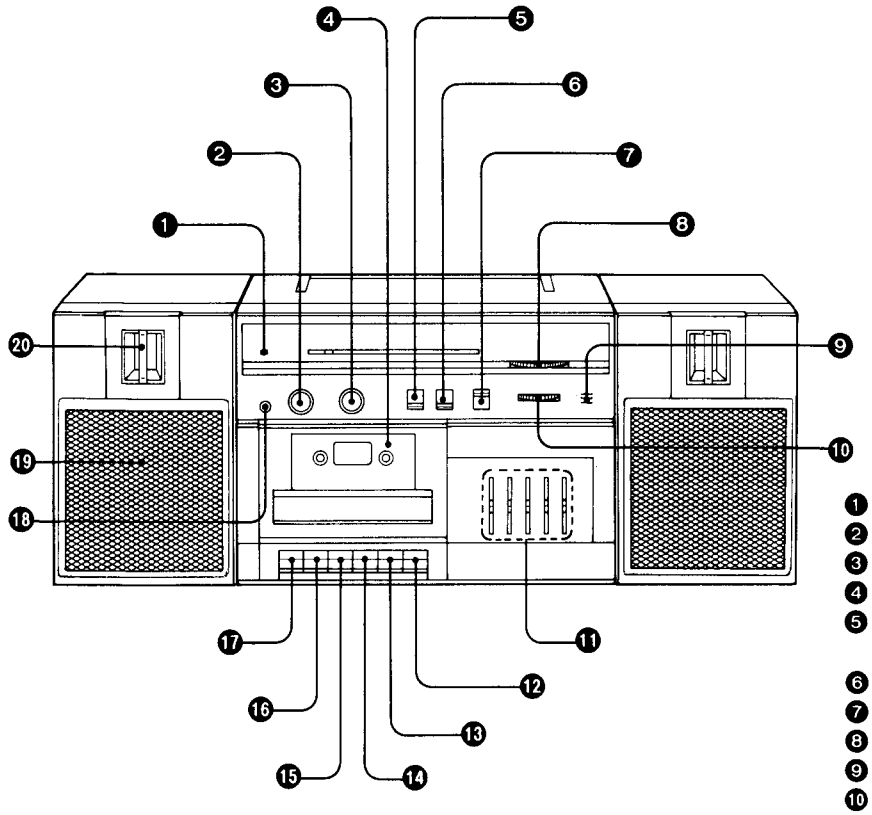
Frequency Response:	80~10,000Hz (with normal tape)
Tape Speed:	4.8cm/s
Track System:	4-track 2 channel stereo recording and playback
Recording System:	AC Bias Magnet Erase

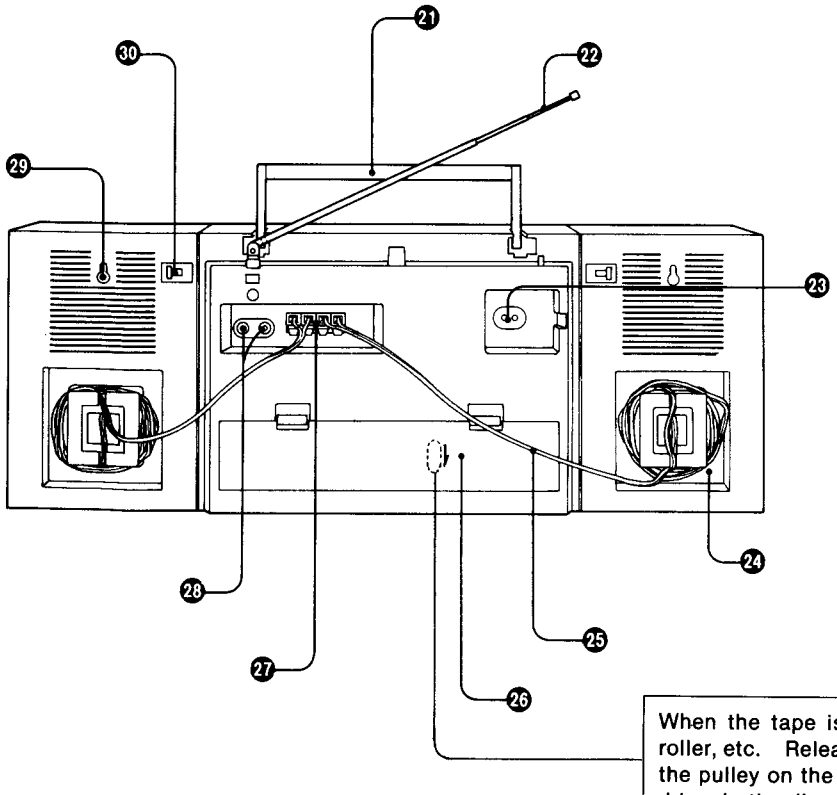
Design and specifications are subject to change without notice.

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

LOCATION OF CONTROLS AND COMPONENTS





❶ FM Stereo Indicator (FM STEREO)
❷ Balance Control (BALANCE)
❸ Volume Control (VOLUME)
❹ Cassette Compartment
❺ FM Mode Selector/Beat Proof Swith (FM MODE/B.P)
❻ Function Selector (SELECTOR)
❼ Band Selector (BAND)
❽ Tuning Control (TUNING)
❾ Built-in Microphone (MIC)
❿ Fine Tuning Control (FINE TUNING)
⓫ Graphic Equalizer Controls
⓬ Pause Button (❚❚ PAUSE)
⓭ Stop/Eject Button (■/▲ STOP/EJECT)
⓮ Fast Forward Button (▶▶ FF)
⓯ Rewind Button (◀◀ REW)
⓰ Playback Button (▶ PLAY)
⓱ Record Button (● RECORD)
⓲ Headphones Jack (PHONES) [32Ω, φ3.5]
When using the headphones, avoid listening to sound for a long period of time and avoid excessive volume levels, which may injure your ears. (Optional headphones; EAH-S10)
⓳ Speakers (Woofer) [12cm/3Ω]
⓴ Speakers (Tweeter) [2cm × 4cm/300Ω]
㉑ Handle
㉒ Telescopic Antenna
㉓ AC Socket (AC IN ~)
㉔ Speaker Cable Compartments
㉕ Speaker Cables
㉖ Battery Compartment
㉗ Speaker Terminals [SPEAKER (IMP 3–8Ω)]
㉘ Line Input Jacks (LINE IN) [280mV/47kΩ]
㉙ Speaker Wall Mounts
㉚ Speaker Release Levers (RELEASE)

When the tape is caught in the pinch roller, etc. Release the tape by turning the pulley on the motor with the screw-driver in the direction of the arrow.

DISASSEMBLY INSTRUCTIONS

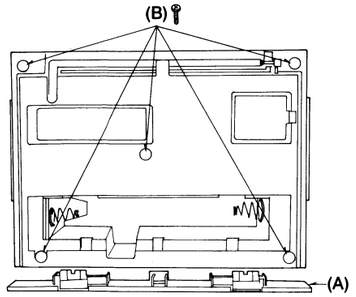


Fig. 1

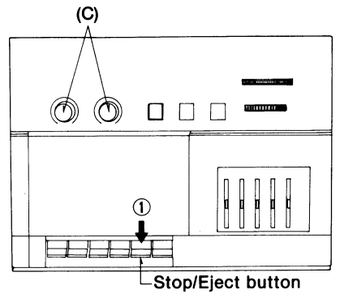


Fig. 2

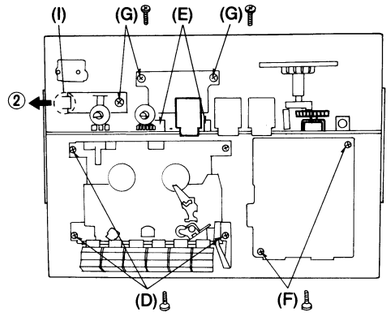


Fig. 3

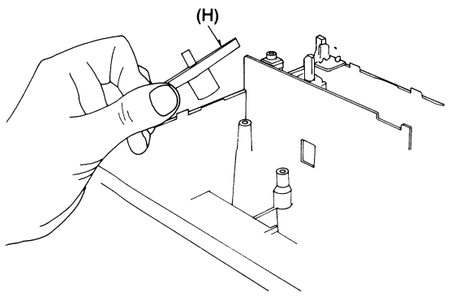


Fig. 4

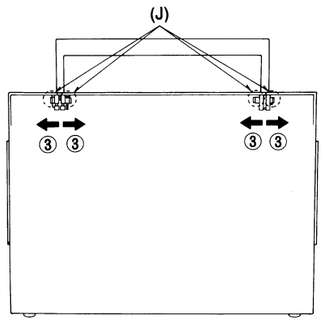


Fig. 5

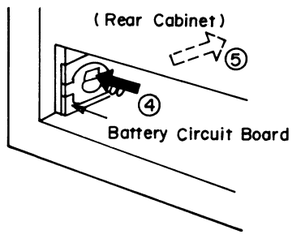


Fig. 6

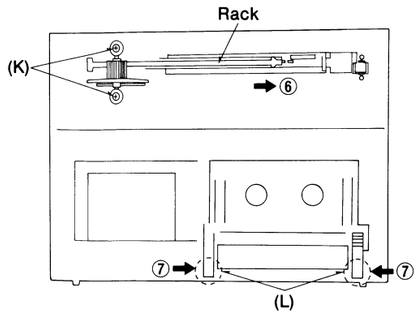


Fig. 7

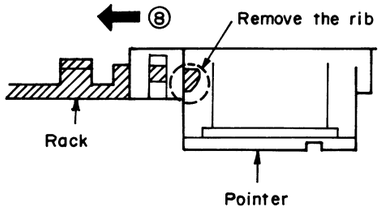


Fig. 8

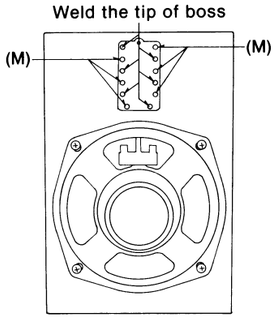


Fig. 9

Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
1	1	Front Cabinet	Battery Cover.....(A)×1
2	1		Screw (3×40)mm .....(B)×5
3	2		Knob.....(C)×2
4	2		Push the stop/eject button in the direction of arrow ①.
5	3	Mechanism	Screw (3×10)mm .....(D)×3
6	3		Socket (CP1, CP2) .....(E)×2

Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
7	3	G. EQ Circuit Board	Screw (3×10)mm .....(F)×2
8	3	Main Circuit Board	Screw (3×10)mm .....(G)×3
9	4		R/P Lever.....(H)×1
10	3		Push the rib in the direction of arrow ②.....(I)×1
11	5	Handle	Push the rib in the direction of arrow ③.....(J)×4
12	6	Battery Circuit Board	Push the rib in the direction of arrow ④ and pull a battery circuit board in the direction of arrow ⑤.
13	7	Tuning Knob	Screw (3×14)mm .....(K)×2
14	7	Rack and Pointer	Push the rack in the direction of arrow ⑥.
15	7	Cassette Compartment	Push the rib in the direction of arrow ⑦.....(L)×2
16	8	Pointer	Remove the rib and pull a rack in the direction of arrow ⑧.
17	9	Tweeter	Cut the tip of boss with a cutter.....(M)×6

■ HOW TO FIX THE R/P LEVER

Fix the R/P Lever by pressing ①, and then ②.

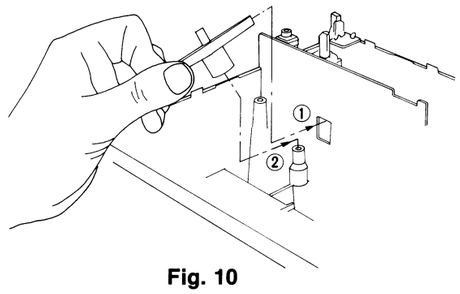


Fig. 10

■ HOW TO FIX THE CASSETTE COMPARTMENT SPRING

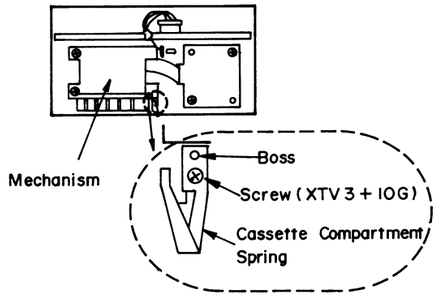


Fig. 12

The cassette compartment spring can be removed by removing one screw (XTV3+10G).

〈**Attachment**〉

After attaching the mechanism, position the cassette compartment spring in place with the boss and secure it with the screw (XTV3+10G).

■ HOW TO FIX THE RACK AND POINTER

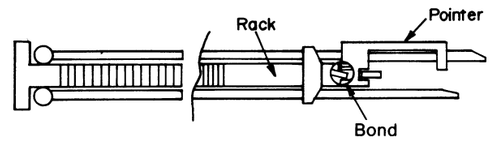


Fig. 11

If the rack and pointer have been removed to perform repair, lock them back in position with the bond.

■ 0 (ZERO) POINT ADJUSTMENT

1. Line up the dial point in the front cabinet assembly with the "0" point graduation as shown in Fig. 13.
2. Turn the variable capacitor gear on the main circuit board all the way in the direction of arrow ①. (Fig. 14)
3. Next, assemble the front and rear cabinets, and the 0 (zero) point adjustment is complete.

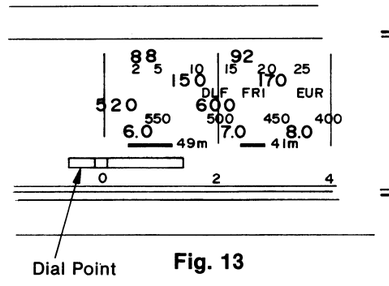


Fig. 13

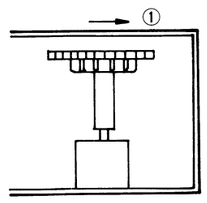


Fig. 14

D

SCHEMATIC DIAGRAM

Line in Signal Line
Radio (FM) Signal Line
Tape (PLAYBACK) Signal Line
Tape (RECORD) Signal Line
Main (Radio/Tape) Signal Line
+Ⓑ Voltage Line

MAIN CIRCUIT

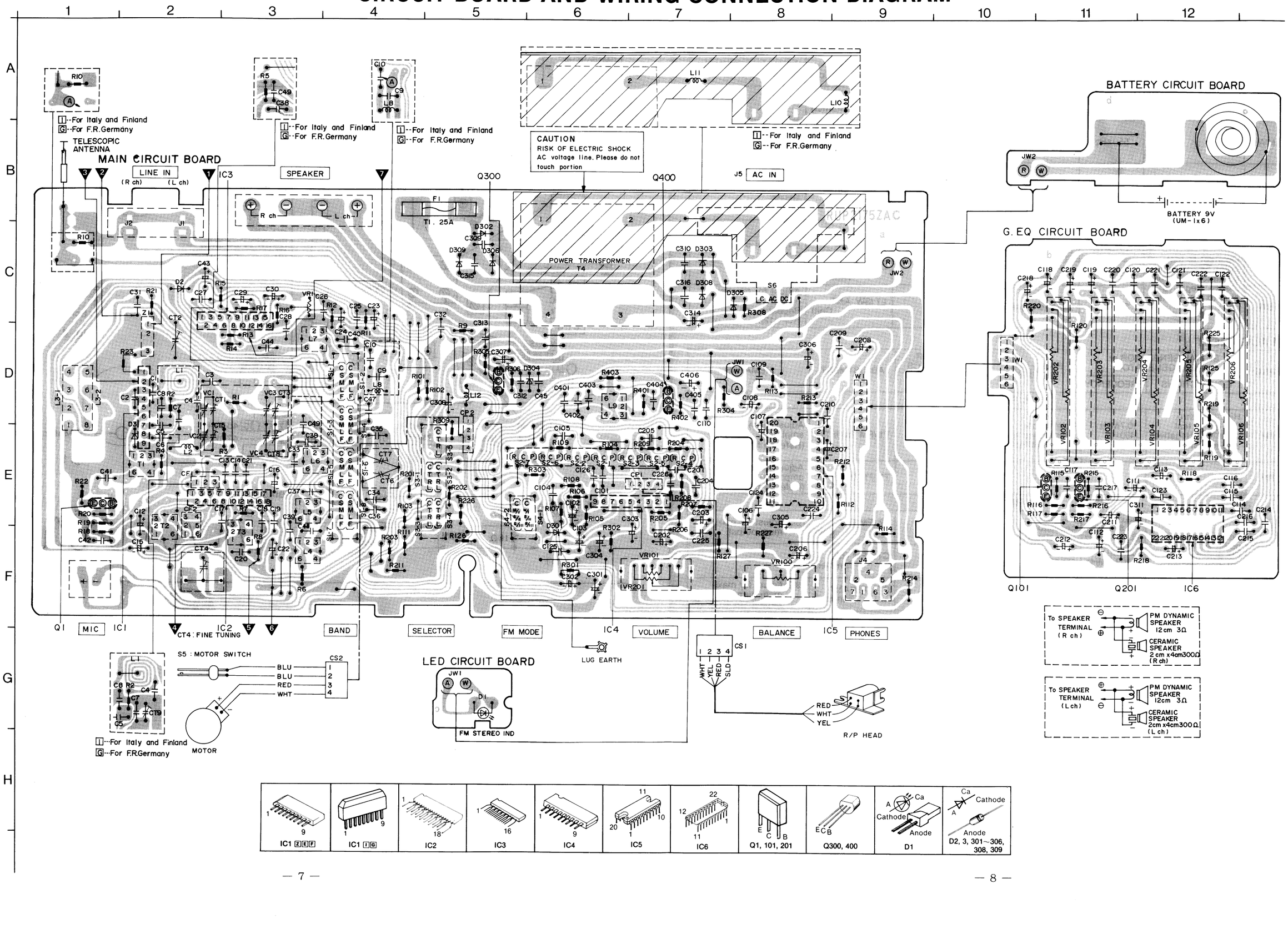
IC1 (AN7205) / (RVITA7358P) FM FRONT END
Q1 (2SC3313B) FM IF AMP
D2 (RVDISS133) SWITCHING (AM MONO)
IC2 (BA4236L) FM/AM IF AMP, DET AM OSC, MIX, AF AMP
IC3 (RVIBAI332L) FM MPX
D1 (RVDSEL112RT) FM STEREO IND
IC4 (BA3308M) PRE AMP
IC5 (LA4108R) POWER AMP
D301 (RVD1SS133) SWITCHING
Q300 (2SC2001K1) REGULATOR
D304 (RVDMTZ6R8B) REGULATOR
Q101,201 (2SC3311R) G.EQ AMP
Q400 (2SC1740R) BIAS OSC
IC6 (AN7330K) G. EQ AMP
D302,303,305,306,308,309 (RVDISR35) RECT

TELESCOPIC ANTENNA
BUILT-IN MICROPHONE
R/P HEAD (Lch) (Rch)
ERASE HEAD
LINE IN (Lch) J1 (Rch) J2 (280mV/47KΩ)
Lch CERAMIC SPEAKER 2cmx4cm 300Ω
Rch PM DYNAMIC SPEAKER 12cm 3Ω
Lch PM DYNAMIC SPEAKER 12cm 3Ω
Rch CERAMIC SPEAKER 2cmx4cm 300Ω
J4 HEADPHONES (32Ω)
J5 AC IN 220V. 50Hz / 240V. 50Hz
MOTOR
S5 MOTOR SWITCH
BATTERY 9V (UM-1x6)
LED CIRCUIT

1 --- For Italy and Finland
2 --- For F.R.Germany

▼ Be sure to fold at the (▼) mark so that mark is on the outside.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



S5 : MOTOR SWITCH

CT4 : FINE TUNING

IC1 Z E F	IC1 I G	IC2	IC3	IC4	IC5	IC6	Q1, 101, 201	Q300, 400	D1	D2, 3, 301~306, 308, 309

Notes (

1. S1-
2. S2-
3. S3-
4. S4-
5. S5
6. S6
7. VR
8. VR
9. VR
10. VR
11. DC vol (No

ELECTR
Numberi

Example:
ERD
Type

ERJ
Type

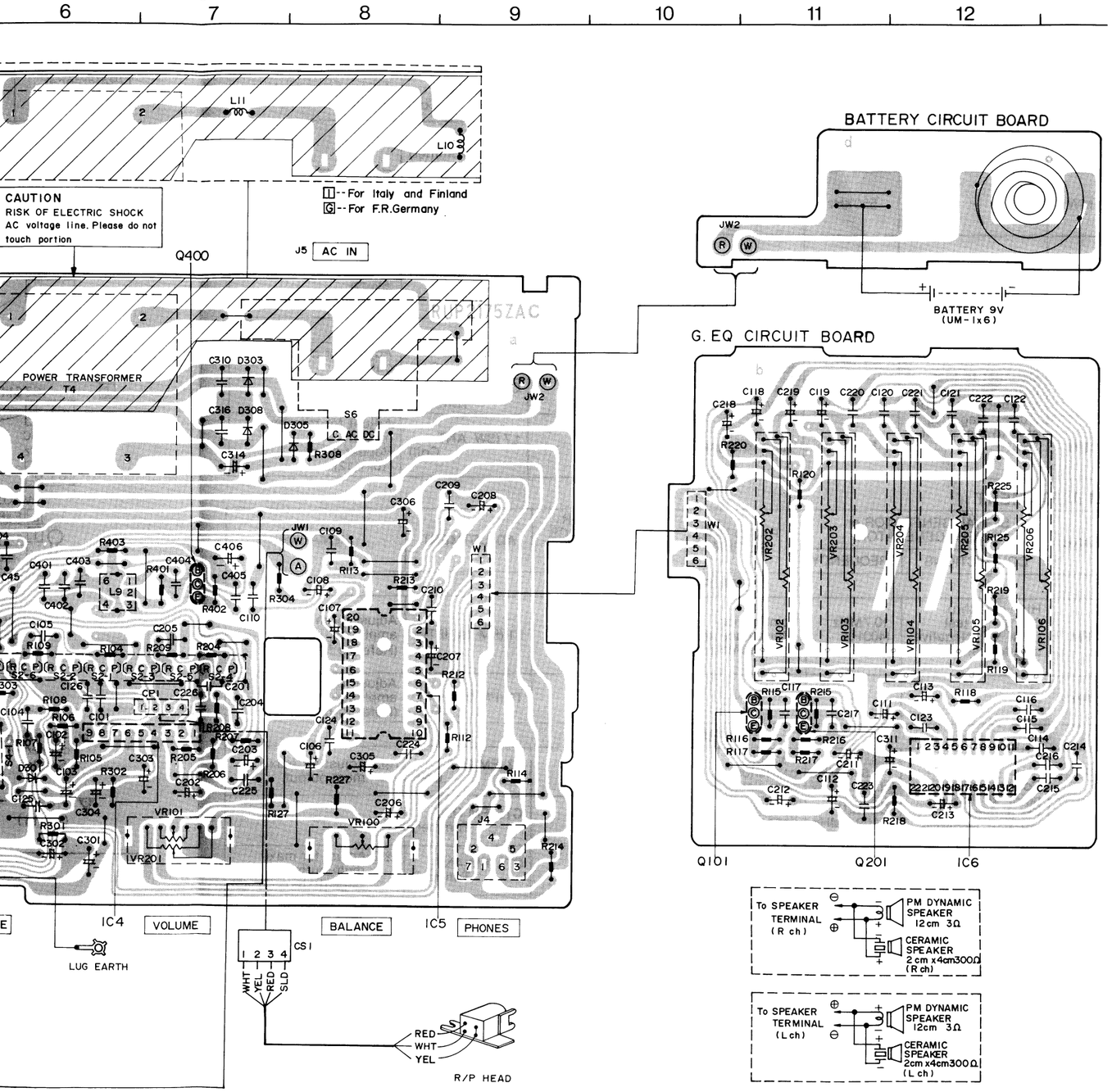
Res
ERD: Ca
ERC: Sc
ERF: In Bo Wi Re
ERG: Mo Re
ERM: Wi Re
ERO: Su Mo Re
ERX: Mo Re
RRJ:
ERJ:

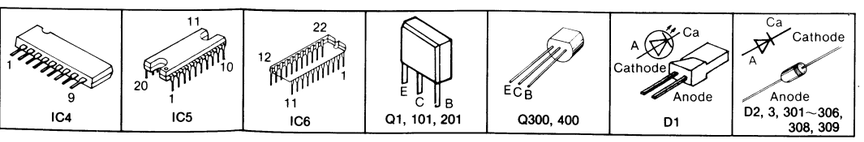
※ Capacit otherwis
※ Resistar otherwis

REPLACEME

Ref. No.
CAPA
C 1, 4, 8
C 2
C 3, 5
C 6
C 7 Z E F
C 7 I G
C 9, 33
C 10 Z E F
C 10, 40 I G
C 12
C 13, 17, 19, 20, 114, 122, 125, 214, 222, 225, 404
C 14
C 15, 23, 24, 29, 103, 112, 113, 118, 203, 212, 213, 218
C 16
C 18
C 21, 41, 312, 405
C 22

AND WIRING CONNECTION DIAGRAM





Notes (for schematic diagram)

1. S1-1~S1-8: Band switch in "FM" position. (F...FM, L...LW, M...MW, S...SW)
2. S2-1~S2-7: R/P switch in "Playback" position. (P...Playback, R...Record)
3. S3-1~S3-5: Function select switch in "LINE" position. (L...LINE, R...RADIO, T...TAPE/OFF)
4. S4-1, S4-2: FM Mode/B.P switch in "STEREO/III" position. (S/III...STEREO/III, S/II...STEREO/II, M/I...MONO/I)
5. S5: Motor switch in "OFF" position.
6. S6: AC/DC IN select switch in "AC IN" position.
7. VR1: VCO Frequency adjust VR.
8. VR100: Balance control VR.
9. VR101, 201: Volume control VR.
10. VR102~106, 202~206: Graphic equalizer VR.
11. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
    〈 〉...FM, ( )...AM, [ ]...Record,
    No mark...Playback
12. Battery current: No signal..... 56mA
    Maximum output (radio)..... 1050mA
    Maximum output (tape)..... 1040mA
13. Described in schematic diagram are two types of numbers; the supply parts number and production parts number for transistors and diodes.
    One type number is used for supply parts number and production parts number which they are identical.
    e.g. Q1
    2SC2412NRTB, LNSTB ← Production parts number
    (2SC2412) ← Supply parts number
14. The supply parts number is described alone in the replacement parts list.
15. The mark (▼) shows test point. e.g. ▼ =test point 1.
16. Important safety notice
    Components identified by ⚠ mark have special characteristics important for safety.
    When replacing any of these components, use only manufacturer's specified parts.

- **This schematic diagram may be modified at any time with the development of new technology.**

ELECTRICAL PARTS LIST

Numbering System of Resistor

Example:

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω)

ERJ	6G	C	J	2R2
Type	Wattage	Shape	Tolerance	Value (2.2Ω)

Resistor Type		Wattage	Tolerance
ERD:	Carbon Resistor	10 : 1/8W	F : ±1%
ERC:	Solid Resistor	25 : 1/4W	G : ±2%
ERF:	Incombustible Box-Shaped Wire-Wound Resistor	50 : 1/2W	J : ±5%
		18 : 1/8W	K : ±10%
		14 : 1/4W	H : ±20%
		12 : 1/2W	
ERG:	Metal Oxide-Film Resistor	1 : 1W	
		2 : 2W	
ERM:	Wire-Wound Resistor	3 : 3W	
		S1 : 1/2W	
ERO:	Superstable Metal Film Resistor	S2 : 1/4W	
		6G : 1/10W	
		8G : 1/8W	
ERX:	Metal-Film Resistor		
RRJ: ERJ:	Chip Resistor		

Numbering System of Capacitor

Example:

ECKD	1H	102	Z	F
Type	Voltage	Value (1000pF)	Tolerance	Peculiarity

ECEA	50	M	R47
Type	Voltage	Peculiarity	Value (0.47μF)

Capacitor Type		Voltage	Tolerance
ECCD:	Ceramic Capacitor (Chitacon)	(ECCD, ECKD Type) 1H : 500V DC 2H : 500V DC	K : ±10% M : ±20% Z : +80% −20% J : ±5% G : ±2% F : ±1% C : ±0.25pF D : ±0.5pF F : ±1pF
ECKD:	Ceramic Capacitor (Chitabari)	(ECFD Type) C : 12V DC D : 25V DC E : 50V DC	
ECFD:	Semiconductor Ceramic Capacitor	(ECQ Type) 05 : 50WV DC 1 : 100WV DC	
ECE□:	Electrolytic Capacitor	(ECE, ECS Type) 0G : 4V 0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 1J : 63V 2A : 100V	
ECS□:	Tantalum Fixed Electrolytic Capacitor		
ECQ□:	Polystyrenc Film Capacitor		
ECQS:	Polystyrene Film Capacitor		
ECQS:	Polypropylene Film Capacitor		
ECQV:	T.F Capacitor		
ECU□: RCU□:	Chip Capacitor		
ECBT:	Cylindrical Ceramic Capacitor		

※ Capacity are in microtarads (μF) unless specified otherwise, P=Pico-farads.
※ Resistance are in ohms (Ω), unless specified otherwise, 1K=1,000Ω, 1M=1,000KΩ

Notes:
Z...For all European areas except E F I G.
E...For United Kingdom.
F...For France.
I...For Italy and Finland.
G...For F.R. Germany.

REPLACEMENT PARTS LIST

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
CAPACITORS		C 25, 26 Z E I G	ECFT1C223MD	C 106, 206	ECEA0JU101	**RESISTORS**		R 17	ERDS2TJ224
		C 25, 26 F	ECFT1C333MD	C 107, 207, 308	ECEA1EU470			R 18 Z E F	ERDS2TJ332
C 1, 4, 8	RCBS1H102KB	C 27	ECFT1C153MD	C 108, 208, 303	ECEA1AU102	R 1, 6	ERDS2TJ470	R 19, 119, 219, 304, 403	ERDS2TJ331
C 2	RCBS1H4R7KC	C 28	ECQP2A102JZ			R 2, 114, 118, 214, 218	ERDS2TJ101	R 20	ERDS2TJ474
C 3, 5	RCBS1H180JC	C 30, 301	ECEA1HU0R1	C 109, 120, 209, 220	ECFT1C104MD	R 3	ERDS2TJ332	R 21	ERDS2TJ100
C 6	RCBS1H470JL	C 31	ECCD1H470K	C 110, 117, 210, 217	ECFT1C473MD	R 4	ERDS2TJ221	R 22	ERDS2TJ470
C 7 Z E F	RCBS1H200JC			C 115, 215	RCBS1C682MX	R 5 I G	ERDS2TJ392	R 23	ERDS2TJ330
C 7 I G	ECCD1H180JR	C 32, 313	ECKD1H223ZF	C 116, 216	RCBS1C222MX	R 7, 107, 126, 207, 226, 301	ERDS2TJ222	R 101, 201	ERDS2TJ684
C 9, 33	ECCD1H100KC	C 34, 47	ECCD1H050CC	C 119, 219	ECEA1HUR33	R 8 Z E I G	ERDS2TJ183	R 102, 202	ERDS2TJ823
C 10 Z E F	ECCD1H470K	C 35	ECCD1H150K	C 123, 126, 223, 226	RCBS1H471KB	R 8 F	ERDS2TJ682	R 103, 203	ERDS2TJ473
C 10, 40 I G	ECCD1H100KC	C 36	ECQP2A221JZ	C 124, 224	ECKD1H471KB	R 9 Z E F	ERDS2TJ820	R 105, 115, 205, 215	ERDS2TJ124
C 12	ECEA1HU2R2	C 37	ECQP2A361JZ	C 302	ECEA1HUR22	R 9 I G	ERDS2TJ560		
C 13, 17, 19, 20, 114, 122, 125, 214, 222, 225, 404	ECFT1C223MD	C 38	ECQP2A392JZ	C 305	ECEA1CU221			R 106, 206	ERDS2TJ680
		C 39, 45, 104, 121, 204, 221	ECFT1C333MD	C 306	ECEA1CU222	R 10	ERDS2TJ104	R 109, 209	ERDS2TJ123
		C 40 Z E F	ECCD1H050CC			R 11, 12 Z E	ERDS2TJ392	R 111, 211	ERDS2TJ562
		C 42	ECKD1H103MD	C 307, 314	ECEA1CU101	R 11, 12 F	ERDS2TJ222	R 113, 213	ERDS2TJ2R2
C 14	RCBS1H331KB	C 43, 111, 211, 304	ECEA1CU100	C 309, 310, 315, 316	ECKD1H103ZF	R 11, 12 I G	ERDS2TJ332	R 116, 216, 309	ERDS2TJ391
C 15, 23, 24, 29, 103, 112, 113, 118, 203, 212, 213, 218	ECEA1HU010	C 44 Z E F	ECKD1H331KB	C 311	ECEA1AU471	R 13 Z E F	ERDS2TJ561	R 120, 220	ERDS2TJ103
		C 44 I G	ECFT1C223MD	C 401	ECKD1H181K	R 13, 18 I G	ERDS2TJ102	R 302	ERDS2TJ105
		C 48	ECQP2A151JZ	C 402	ECKD1H561KB	R 14, 104, 204, 305	ERDS2TJ102	R 303	ERDS2TJ330
C 16	ECEA1HU4R7	C 49	ECCD1H120K	C 403	ECQP2A272JZ	R 15, 108, 112, 208, 212	ERDS2TJ472	R 306 Z E F	ERDS2TJ560
C 18	ECBS1C103NY	C 101, 201	ECBS1C182MX	C 406 Z E F	ECEA1AU221	R 16, 117, 125, 127, 217, 225, 227	ERDS2TJ682	R 306 I G	ERDS2TJ101
C 21, 41, 312, 405	ECKD1H102KB	C 102, 202	ECEA0JU470	C 406 I G	ECEA0JU221			R 308	ERD25FJ5R6
C 22	ECEA1AU221	C 105, 205	ECKD1H332MD					R 401	ERDS2TJ333
								R 402	ERDS2TJ120

ELECTRICAL PARTS LOCATION

REPLACEMENT PARTS LIST

• mark stands for that the parts are supplied in MESA.

Notes:

Z...For all European areas except E F I G.
E...For United Kingdom.
F...For France.
I...For Italy and Finland.
G...For F.R. Germany.

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part No.	Part Name & Description
	INTEGRATED CIRCUIT	
IC 1 Z E F	**AN7205**	IC (FM FRONT END)
IC 1 I G	**RViTA7358P**	IC (FM FRONT END)
IC 2	**BA4236L**	IC (FM/AM IF AMP, DET, AM OSC, MIX, AF AMP)
IC 3	**RViBA1332L**	IC (FM MPX)
IC 4	**BA3308M**	IC (PRE AMP)
IC 5	**LA4108R**	IC (POWER AMP)
IC 6	**AN7330K**	IC (G. EQ AMP)
	TRANSISTORS	
Q 1	**2SC3313B**	Transistor (FM IF AMP)
Q 101, 201	**2SC3311R**	Transistor (G. EQ AMP)
Q 300	**2SC2001K1**	Transistor (REGULATOR)
Q 400	**2SC1740R**	Transistor (BIAS OSC)
	DIODES & RECTIFIERS	
D 1	**RVDSEL1121RT**	LED (FM STEREO)
D 2, 3, 301	**RVD1SS133**	Diode (SWITCHING, D. AGC)
D 302, 303, 305, 306, 308, 309	**RVD1SR35**	Diode (RECT)
D 304	**RVDMTZ6R8B**	Diode (REGULATOR)
	COILS	
L 2 Z E F	**RL04Y93**	Oscillator Coil, FM
L 2 I G	**RL04N198**	Oscillator Coil, FM
L 3	**RLF6W152**	Antenna Coil, MW/LW
L 4	**RL01B13**	Oscillator Coil, LW
L 5	**RL02B108**	Oscillator Coil, MW
L 6	**RL03B87**	Oscillator Coil, SW
L 7	**RLA3B41**	Antenna Coil, SW
L 8	**RLQY30S1**	Coil, Choke
L 9	**RL09B17**	Oscillator Coil, Bias
L 10, 11 I G	**RLQZP470K**	Coil, Choke ⚠
L 12	**RLQY15G5**	Coil, Choke
	TRANSFORMERS	
T 1, 3	**RLi4B153**	IFT, FM 1st, 2nd
T 2	**RLi2B153**	IFT, AM
•T 4 Z E I G	**RLT5K3G9A**	Power Transformer ⚠
•T 4 E	**RLT5K3E3A**	Power Transformer ⚠
	VARIABLE CAPACITORS	
VC 1, 2, 3, 4 (CT 1, 3, 5, 8)	**RCV4RC2RA**	Variable Capacitor/with Trimmer Capacitor
	TRIMMER CONDENSERS	
CT 2 Z E F	**RCVPL20A**	Trimmer Capacitor
CT 2 I G	**RCVPL10A**	Trimmer Capacitor
CT 4	**RCVMFTPC17**	Fine Tuning
CT 6, 7	**RCV2PL10A**	Trimmer Capacitor
CT 9 I G	**RCVCTZ3210**	Trimmer Capacitor
	VARIABLE RESISTORS	
VR 1	**EVND4AA00B14**	FM VCO Adjustment VR. 10k (B)
VR 100	**EWHP3AF15G15**	Balance Control VR. 100k (G)
VR 101, 201	**EWCUNAF15A54**	Volume Control VR. 50k (A)
VR 102, 103, 104, 105, 106, 202, 203, 204, 205, 206	**EWATA3VAAG54**	G. EQ Control VR. 50k (G)
	CERAMIC FILTERS	
CF 1	**RVF107WDZ**	Ceramic Filter (10.7MHz)
CF 2 Z F I G	**RVFSFZ455JL**	Ceramic Filter (455kHz)
CF 2 E	**RVFSFZ470JL**	Ceramic Filter (470kHz)
	FILTER	
Z 1	**EXCFF76108L**	Component Combinations
	FUSE	
F 1	**XBA2C12TB0U**	Fuse (T1.25A) ⚠
	SWITCHES	
S 1	**RSS4H02Z**	Slide Switch, Band
•S 2	**R&H2G02X**	Push Switch, R/P
S 3	**RSS3F08Z**	Slide Switch, Function
S 4	**RSS3B22Z**	Slide Switch, FM Mode/B.P.
S 5	**RFA49Z**	Reaf Switch, Motor
	JACKS	
J 1	**RJF1099Z**	Jack, Line in
J 3	**RJF1098Z**	Jack, Speaker
J 4	**RJJD7S2Z**	Jack, Headphones
J 5 (J6/S6) Z F I G	**RJJA6Z**	Jack, AC/DC IN ⚠
J 5 (J6/S6) E	**RJJA7Z**	Jack, AC/DC IN ⚠

MEASUREMENTS AND ADJUSTMENTS

Notes:

Z...For all European areas except E F I G.
E...For United Kingdom.
F...For France.
I...For Italy and Finland.
G...For F.R. Germany.

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set balance control to center.
3. Set band switch to LW, MW, SW or FM ST.
4. Set function selector to radio.
5. Set Fine tuning control to center.
6. Set power source voltage to 9V DC.
7. Set FM mode/B.P switch to STEREO/III.
8. Output of signal generator should be no higher than necessary to obtain an output reading.

■ LW, MW and SW ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
			AM-IF ALIGNMENT				
(1)	MW	Fashion loop of several turns of wire and radiate signal into loop of receiver.	Z F I G ...455kHz E...470kHz 30% Mod. at 400Hz	Point of non-interference. (on/about 600kHz)	Output meter across voice coil.	T2 (AM IFT)	Adjust for maximum output.
			LW-RF ALIGNMENT				
(2)	LW	〃	136kHz	Tuning capacitor fully closed.	〃	L4 (LW OSC Coil)	〃
(3)	LW	〃	297kHz	Tuning capacitor fully open.	〃	CT6 (LW OSC Trimmer)	〃
(4)	LW	〃	145kHz	Tune to signal.	〃	(※ 1) L3-1 (LW ANT Coil)	Adjust for maximum output. Adjust L3-1 by moving coil bobbin along ferrite core.
(5)	LW	〃	285kHz	〃	〃	CT2 (LW ANT Trimmer)	Adjust for maximum output. Repeat steps (2)~(5).

(※1) Cement antenna bobbin with wax after completing alignment.

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
			MW-RF ALIGNMENT				
(6)	MW	〃	Z E F G ...511kHz I...516kHz	Tuning capacitor fully closed.	〃	L5 (MW OSC Coil)	Adjust for maximum output.
(7)	MW	〃	Z E F G ...1650kHz I...1636kHz	Tuning capacitor fully open.	〃	CT7 (MW OSC Trimmer)	〃
(8)	MW	〃	550kHz	Tune to signal.	〃	(※ 1) L3-2 (MW ANT Coil)	Adjust for maximum output. Adjust L3-2 by moving coil bobbin along ferrite core.
(9)	MW	〃	1,500kHz	〃	〃	CT3 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (6)~(9).
	(※ 1) Cement antenna bobbin with wax after completing alignment.						
			SW-RF ALIGNMENT				
(10)	SW	Connect to test point ▼ through ceramic capacitor (10pF). Negative side to test point ▼.	5.75MHz	Tuning capacitor fully closed.	〃	L6 (SW OSC Coil)	Adjust for maximum output.
(11)	SW		18.8MHz	Tuning capacitor fully open.	〃	CT8 (SW OSC Trimmer)	〃
(12)	SW		5.9MHz	Tune to signal.	〃	L7 (SW ANT Coil)	Adjust for maximum output. Repeat steps (10)~(12).

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
			FM-IF ALIGNMENT				
(1)	FM	High side thru. 0.001μF to test point ▼, Negative side to test point ▼.	10.7MHz (400Hz SWP.)	Point of non-interference. (on/about 90MHz)	Connect vert. amp. of scope to test point ▼. Negative side to test point ▼.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 2.)
(2)	FM	〃	〃	〃	〃	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 3.)
			FM-RF ALIGNMENT				
(3)	FM	Connect to test point ▼ through FM dummy antenna. Negative side to test point ▼.	Z E F I ...86.2MHz G...87.5MHz	Variable capacitor fully closed.	SP out	L2 (FM OSC Coil)	(※2) Adjust for maximum output.
(4)	FM		Z E F I ...109.3MHz G...108MHz	Variable capacitor fully open.	〃	CT5 (FM OSC Trimmer)	〃
(5)	FM		106MHz	〃	〃	CT1 (FM ANT Trimmer)	(※2) Adjust for maximum output. Repeat steps (3)~(5).
	(※2) Three output responses will be present; proper tuning is the center frequency.						

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONICS COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98MHz, 60dB (CW) Connect to test point ▼ through FM dummy antenna. Negative side to test point ▼.	▼...(+) ▼...(−)	VR1	19kHz	Adjust VR1, for 19kHz (±100Hz) reading on electronics counter.

■ TAPE ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8kHz, −20dB)	SP OUT (AC voltmeter & Oscilloscope)	Maximum output.	Azimuth screw	Playback mode (Refer to Fig. 4)
Tape speed	QZZCWAT (3kHz)	SP OUT (Frequency counter)	3000±90Hz	Motor Volume	Playback mode (Refer to Fig. 5)

ITEM
(Reference) Bias oscillation frequency
(Reference) Bias current

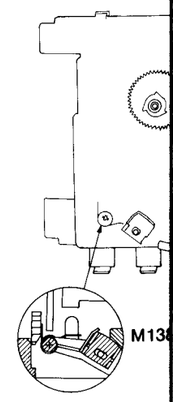
■ ALIGMENT
* Please refer to C

MW AN
1500kH
CT 3
SW OS
5.75MH
MW OSC L6
Z E F G 16
I -----16
CT 7
LW OS
297kH
CT 6
M
Z
I

▼ R/P H
conne
(Shiel

▼ P.C.B
(Earth

■ SPRING LO



M13

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
			MW-RF ALIGNMENT				
(6)	MW	〃	Z E F G ...511kHz I...516kHz	Tuning capacitor fully closed.	〃	L5 (MW OSC Coil)	Adjust for maximum output.
(7)	MW	〃	Z E F G ...1650kHz I...1636kHz	Tuning capacitor fully open.	〃	CT7 (MW OSC Trimmer)	〃
(8)	MW	〃	550kHz	Tune to signal.	〃	(※1) L3-2 (MW ANT Coil)	Adjust for maximum output. Adjust L3-2 by moving coil bobbin along ferrite core.
(9)	MW	〃	1,500kHz	〃	〃	CT3 (MW ANT Trimmer)	Adjust for maximum output. Repeat steps (6)~(9).
	(※1) Cement antenna bobbin with wax after completing alignment.						
			SW-RF ALIGNMENT				
(10)	SW	Connect to test point ▼ through ceramic capacitor (10pF). Negative side to test point ▼2.	5.75MHz	Tuning capacitor fully closed.	〃	L6 (SW OSC Coil)	Adjust for maximum output.
(11)	SW		18.8MHz	Tuning capacitor fully open.	〃	CT8 (SW OSC Trimmer)	〃
(12)	SW		5.9MHz	Tune to signal.	〃	L7 (SW ANT Coil)	Adjust for maximum output. Repeat steps (10)~(12).

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR CONNECTIONS	SIGNAL GENERATOR or SWEEP GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
			FM-IF ALIGNMENT				
(1)	FM	High side thru. 0.001μF to test point ▼3. Negative side to test point ▼2.	10.7MHz (400Hz SWP.)	Point of non-interference. (on/about 90MHz)	Connect vert. amp. of scope to test point ▼4. Negative side to test point ▼5.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 2.)
(2)	FM	〃	〃	〃	〃	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 3.)
			FM-RF ALIGNMENT				
(3)	FM	Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼2.	Z E F I ...86.2MHz G...87.5MHz	Variable capacitor fully closed.	SP out	L2 (FM OSC Coil)	(※2) Adjust for maximum output.
(4)	FM		Z E F I ...109.3MHz G...108MHz	Variable capacitor fully open.	〃	CT5 (FM OSC Trimmer)	〃
(5)	FM		106MHz	〃	〃	CT1 (FM ANT Trimmer)	(※2) Adjust for maximum output. Repeat steps (3)~(5).
	(※2) Three output responses will be present; proper tuning is the center frequency.						

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONICS COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	98MHz, 60dB (CW) Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼2.	▼...(+) ▼...(−)	VR1	19kHz	Adjust VR1, for 19kHz (±100Hz) reading on electronics counter.

■ TAPE ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8kHz, −20dB)	SP OUT (AC voltmeter & Oscilloscope)	Maximum output.	Azimuth screw	Playback mode (Refer to Fig. 4)
Tape speed	QZZCWAT (3kHz)	SP OUT (Frequency counter)	3000±90Hz	Motor Volume	Playback mode (Refer to Fig. 5)

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
(Reference) Bias oscillation frequency	——	▼...(+) ▼...(−)	68±4kHz	——	Record mode Beat proof switch→MONO/I (Refer to Fig. 6, 7)
(Reference) Bias current	——	▼...(+) ▼...(−)	11±2mV	——	Record mode Beat proof switch→MONO/I (Refer to Fig. 6)

■ ALIGMENT POINT

* Please refer to Circuit Board and Wiring Connection Diagram for test point locations.

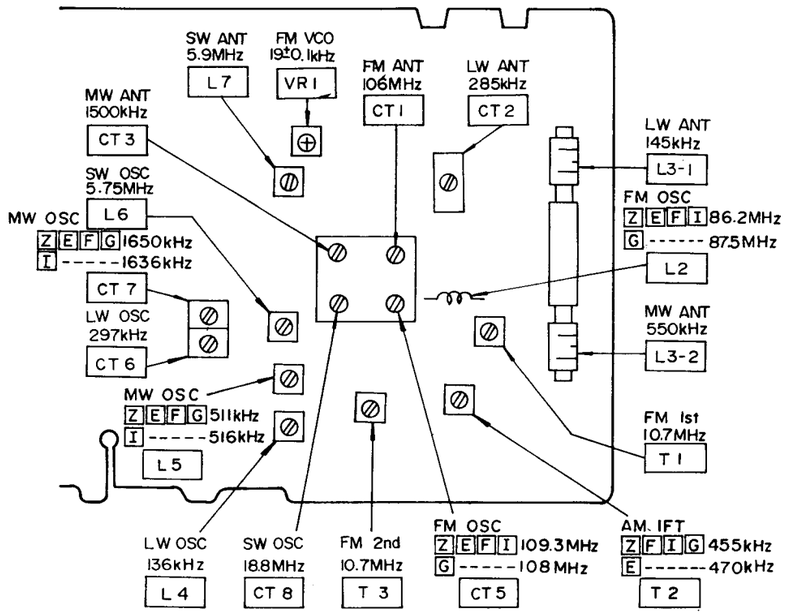


Fig. 1

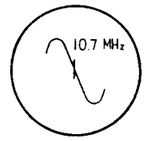


Fig. 2

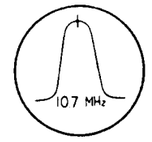


Fig. 3

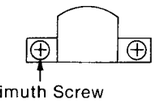


Fig. 4

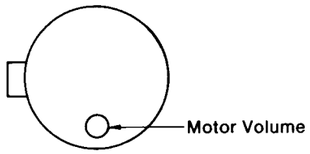


Fig. 5

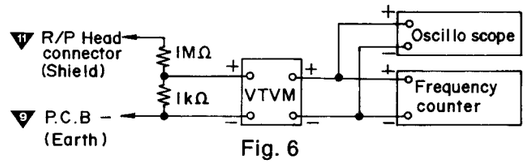


Fig. 6

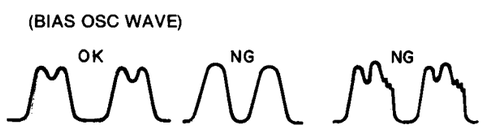
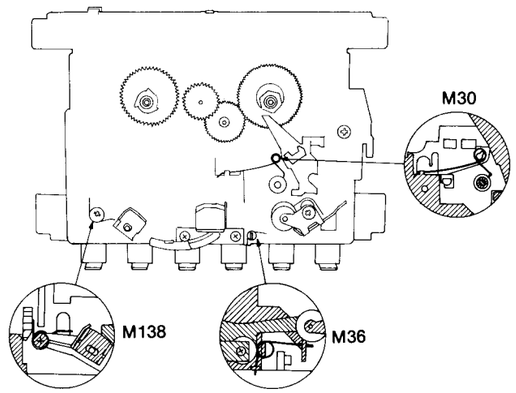
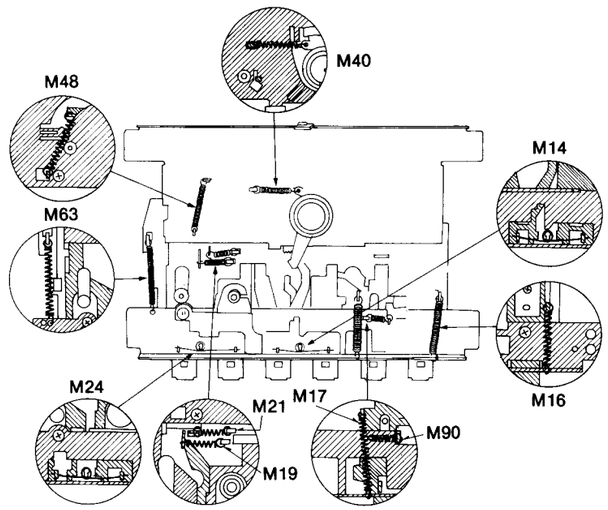


Fig. 7

■ SPRING LOCATION





MECHANISM PARTS LOCATION

Screw Dimensions Quick Reference

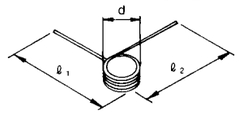
• Dimensions

XSN 3 + 10 = Pan head machine screw, 3mm in diameter, 10mm long.

Type/Diameter/Length

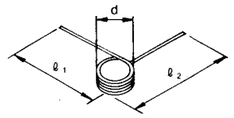
• Types

Precision machine screw	Machine screw	Tapping/Tap-tight machine screw
XQC Flat head	XSB Binding head	XTB Binding head
XQG Oval fillister head	XSC Oval countersunk head	XTC Oval countersunk head
XQH Flat fillister head	XSH Flat fillister head	XTN Pan head
XQS Flat head	XSN Pan head	XTS Flat head
	XSS Flat head	



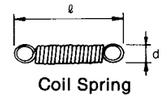
Twist spring (Left turn)

Ref. No.	$l_1 \times l_2 \times d$ (mm)
M24	13.8×13.8×3.1
M14	14.6×14.6×3.3
M36	7.9×19.4×4.3



Twist spring (Right turn)

Ref. No.	$l_1 \times l_2 \times d$ (mm)
M30	9.4×24.1×4
M138	10.5×9.2×5



Coil Spring

Ref. No.	l×d (mm)
M63	14×2
M17	14.9×2.7
M16	15.2×2.4
M90	7.5×2.2
M40	9.8×2.2
M48	14.4×2.2
M21	9×2
M19	10.2×2.2
M34	4.8×3.3

※ There are three types of M86 used for adjustment of the head height.
When servicing, they can be distinguished by their color.

Color	Height	Part No.
Copper	0.1mm	RFE313Z
Gold	0.2mm	RFE314Z
Silver	0.3mm	RFE315Z

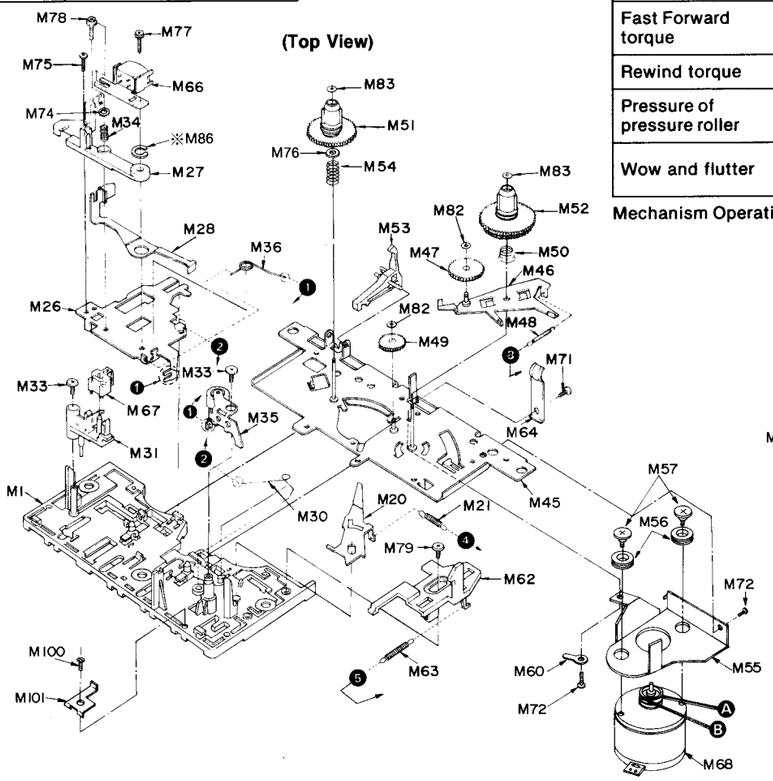
Note:
There are some models that do not use M86 and so do not require use of M86.

Specifications

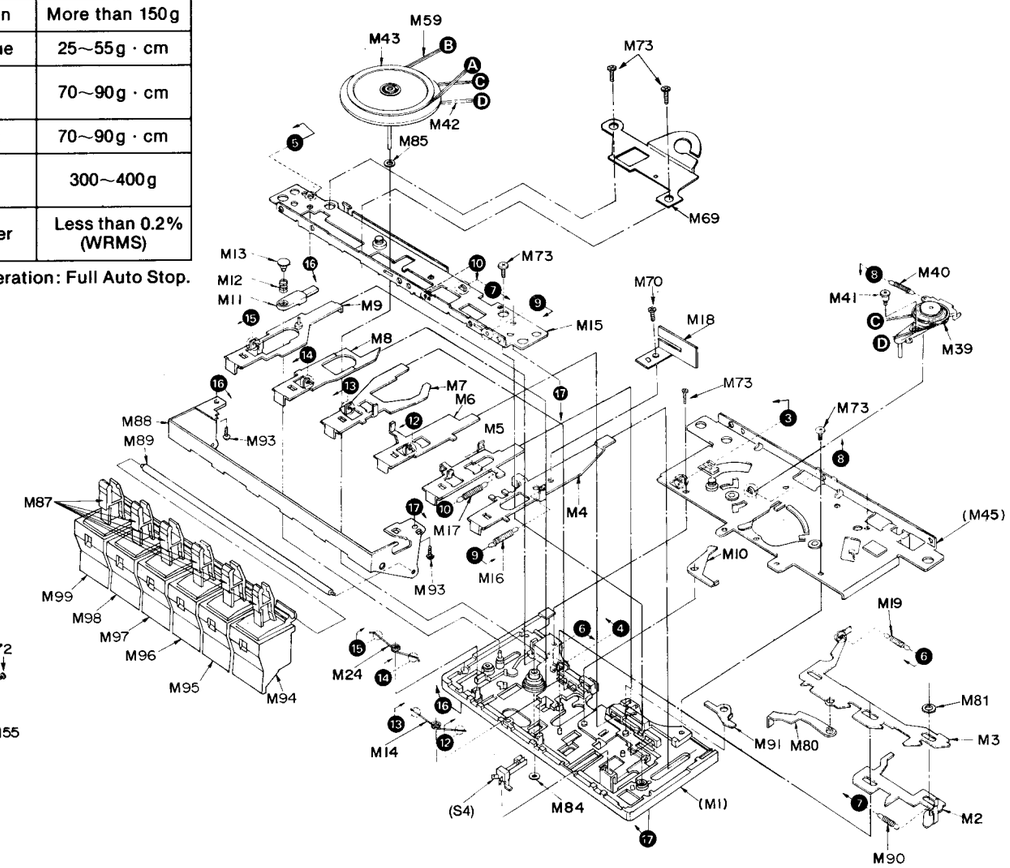
Takeup Tension	More than 150g
Playback torque	25~55g · cm
Fast Forward torque	70~90g · cm
Rewind torque	70~90g · cm
Pressure of pressure roller	300~400g
Wow and flutter	Less than 0.2% (WRMS)

Mechanism Operation: Full Auto Stop.

(Top View)



(Bottom View)



REPLACEMENT PARTS LIST

• mark stands for that the parts are supplied in MESA.

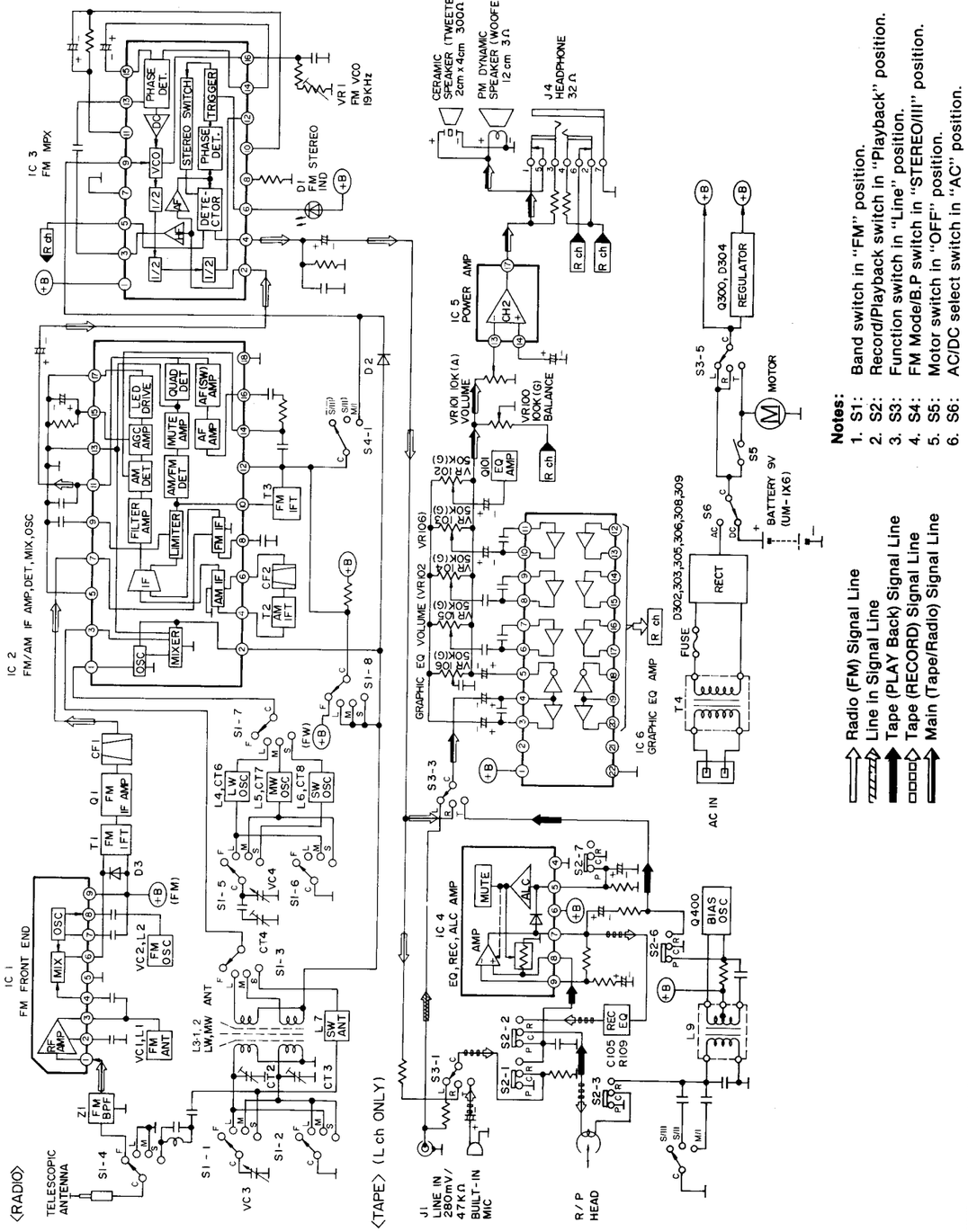
Ref. No.	Part No.	Part Name & Description
		MECHANICAL PARTS
M 1	RFU41Z	Button Base Ass'y
M 2	RFY541Z	Lever, Switch
M 3	RFY579Z	Lever, Button Operation
M 4	RFY629Z	Lever, Record Button
M 5	RFY630Z	Lever, Playback Button
M 6	RFY631Z	Lever, Rewind Button
M 7	RFY632Z	Lever, Fast Foward Button
M 8	RFY633Z	Lever, Stop/Eject Button
M 9	RFY621Z	Lever, Pause
M 10	RFY548Z	Lever, Rewind
M 11	RFG86Z	Lever, Pause
M 12	RFS459Z	Spring Pause Lever
M 13	RFS536Z	Stopper, Pause Spring
M 14	RFS529Z	Spring, Button Lever-B
M 15	RFU88Z	Sub Shassis Ass'y
M 16	RFS463Z	Spring, Record Button
M 17	RFS530Z	Spring, Playback Button
M 18	RFS623Z	Spring, Record Lever
M 19	RFS466Z	Spring, Button Operation Lever
M 20	RFY549Z	Lever, Auto Stop Operation
M 21	RFS590Z	Spring, Auto Stop Operation Lever
M 24	RFS462Z	Spring, Button Lever-C
M 26	RFE227Z	Panel, Head
M 27	RFU39Z	Head Base
M 28	RFY394Z	Sensing Plate Ass'y
M 30	RFS531Z	Spring, Head Panel
M 31	RFY391Z	Arm, Erase Head
M 33	RFE251Z	Screw, Erase Head Arm, Pinch Roller M'tg
M 34	RFS447Z	Spring, Azimuth Adjustment
M 35	RFR29Z	Pinch Roller Ass'y
M 36	RFS448Z	Spring, Pinch Roller Ass'y
M 39	RFQ46Z	R/F Pulley Arm Ass'y
M 40	RFS532Z	Spring, R/F Pulley Arm Ass'y
M 41	RFE172Z	Screw, R/F Pulley Arm Ass'y M'tg
M 42	RFB53Z	Belt, REW/F.F
M 43	RFF37Z	Flywheel Ass'y
M 45	RFU40Z	Reel Base Ass'y
M 46	RFY697Z	Take Up Gear Plate Ass'y
M 47	RFG61Z	Gear, Take Up Roller
M 48	RFS450Z	Spring, Take Up Gear Plate Ass'y
M 49	RFG62Z	Gear, Fast Forward
M 50	RFS537Z	Spring, Back Tension-R
M 51	RFJ50Z	Supply Reel Table Ass'y
M 52	RFJ44Z	Take Up Reel Table Ass'y
M 53	RFY716Z	Lever, Erase Safety
M 54	RFS563Z	Spring, Back Tension-L
M 55	RFD220Z	Bracket, Motor Ass'y
M 56	RFi27Z	Rubber, Motor Ass'y
M 57	SMQ4918	Screw, Motor Ass'y M'tg
M 59	RFB55Z	Belt, Flywheel
M 60	RFE228Z	Lug Terminal
M 62	RFY685Z	Lever, Eject Slide
M 63	RFS580Z	Spring, Eject Slide Lever
M 64	RFS697Z	Spring, Cassette Retainer
M 66	RJH2E9Y	Head, Record/Playback
M 67	RJH2C12XZ	Head, Erase
M 68	RFM79Z	Motor Ass'y, with Pully
M 69	RFE279Z	Metal, Guide
M 70	RFE229Z	Screw ⊕2×3, Record Lever M'tg
M 71	XTN2+3B	Screw ⊕2×3, Cassette Retainer Spring M'tg
M 72	XTN2+4B	Screw ⊕2×4, Motor Bracket, Leaf Switch Plate etc. M'tg
M 73	XTB2+4	Screw ⊕2×4, Sub Chassis, Reel Table Plate etc. M'tg
M 74	RFE297Z	Washer, Azimuth Adjustment
M 75	XSN2+6	Screw ⊕2×6, Head Base M'tg
M 76	RFN170Z	Washer, Supply Reel Ass'y
M 77	XSN2+7	Screw ⊕2×7, R/P Head M'tg
M 78	RFE230Z	Screw ⊕2×7, Azimuth Adjustment
M 79	RFE255Z	Screw ⊕3×6, Eject Slide Lever M'tg
M 80	RFY591Z	Lever, E Kick
M 81	RFN167Z	Washer, Button Operation Lever
M 82	RFN143Z	Washer, FF Gear, Take Up Roller M'tg
M 83	RFN142Z	Washer, Reel Table M'tg
M 84	RFN123Z	Washer, Flywheel M'tg
M 85	RFN153Z	Washer, Flywheel
※M 86	RFE313Z	Terminal, Lug Ⓒ
※M 86	RFE314Z	Terminal, Lug Ⓐ
※M 86	FE315Z	Terminal, Lug Ⓢ
M 87	RFY636Z	Lever, Operation Ⓗ
M 88	RFD252Z	Frame, Button
M 89	RFY637Z	Shaft, Button
M 90	RFS567Z	Spring, Switch Lever
M 91	RFX101Z	Stopper, Record/Playback
M 93	XQN2+A7FZ	Screw ⊕2×7, Button Frame Ass'y M'tg
• M 94	RBC883Z	Button, Record Ⓢ
• M 95	RBC884Z	Button, Playback Ⓢ
• M 96	RBC885Z	Button, Rewind Ⓢ
• M 97	RBC886Z	Button, Fast Forward Ⓢ
• M 98	RBC887Z	Button, Stop/Eject Ⓢ
• M 99	RBC888Z	Button, Pause Ⓢ
M 100	RFE280Z	Screw, Detector Bracket
M 101	RFD269Z	Bracket, Detector

※ There are three types of M86 used for adjustment of the head height.
When servicing, they can be distinguished by their color.

The letter in the circle after the part name indicates the color of the part.
Ⓗ... Gray, Ⓢ... Silver, Ⓒ... Copper, Ⓐ... Gold

| | | |

BLOCK DIAGRAM

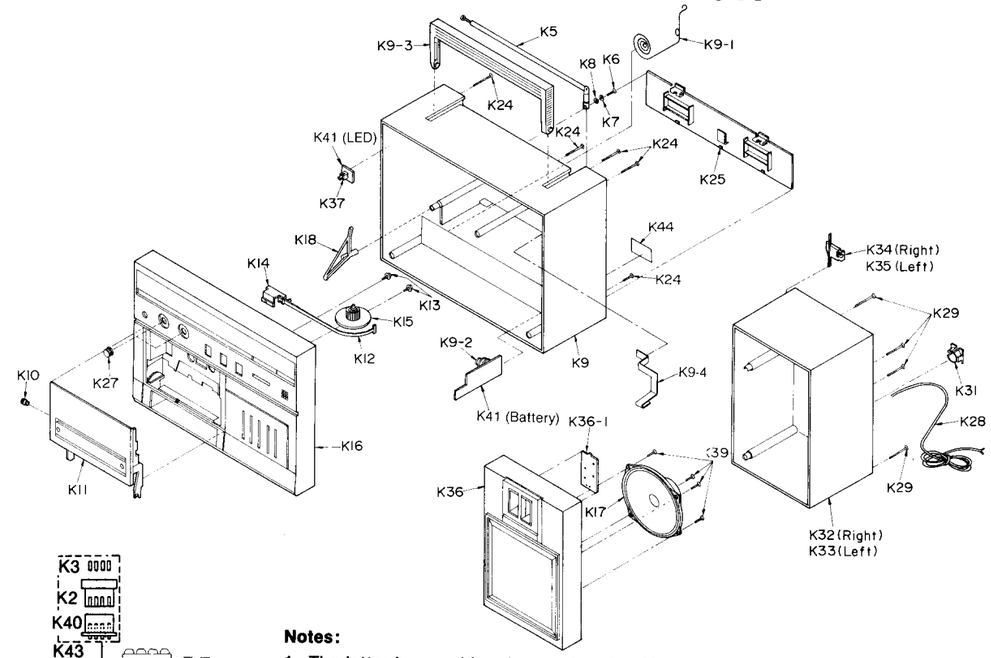


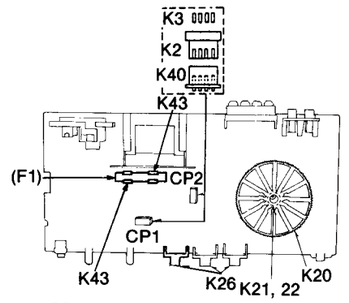
Notes:

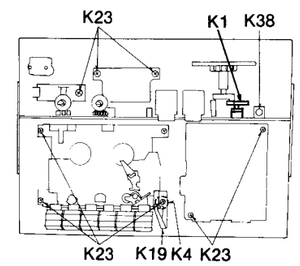
1. S1: Band switch in "FM" position.
2. S2: Record/Playback switch in "Playback" position.
3. S3: Function switch in "Line" position.
4. S4: FM Mode/B.P switch in "STEREO/II" position.
5. S5: Motor switch in "OFF" position.
6. S6: AC/DC select switch in "AC" position.

Radio (FM) Signal Line
Line in Signal Line
Tape (PLAY Back) Signal Line
Tape (RECORD) Signal Line
Main (Tape/Radio) Signal Line

CABINET PARTS LOCATION







Notes:

1. The letter in round brackets in the Ref. No. column indicates the shipping destination.
   (Z)...For all European areas except (E), (F), (I), (G).
   (E)...For United Kingdom.
   (F)...For France.
   (I)...For Itary and Finland.
   (G)...For F.R. Germany.
2. The letter in square brackets in the Ref. No. column indicates the color of the product.
   [K]...Black Type, [S]...Silver Type
3. The letter in the circle after the part name indicates the color of the part.
   (K)...Black, (S)...Silver
4. • mark stands for that the parts are supplied in MESA.

REPLACEMENT PARTS LIST

Important safety notice
Components identified by △ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part No.	Part Name & Description
		CABINET PARTS
K 1	**RBT280Z**	Knob, Fine Tuning (K)
K 2	**RJS4L3Z**	Socket (CP1, CP2/4 Pin)
K 3	**RJT707Z**	Terminal Socket
K 4	**RJT514Z**	Lug, Earth
K 5	**XEARR175FAY**	Telescopic Antenna
K 6	**XSN3+8S**	Screw ⊕3×8, Telescopic Antenna M'tg
K 7	**XWA3B**	Washer φ3, Telescopic Antenna M'tg
K 8	**XWG3**	Washer φ3, Telescopic Antenna M'tg
•K 9 (Z) (E) (F) [K]	**RYFXC36LZKSN**	Rear Cabinet Ass'y (K) △
•K 9 (Z) (F) [S]	**RYFXC36LZKS7**	Rear Cabinet Ass'y (S)
•K 9 (I) (G) [K]	**RYFXC36LZGKS**	Rear Cabinet Ass'y (K)
•K 9 (I) (G) [S]	**RYFXC36LZGK7**	Rear Cabinet Ass'y (S)
K 9-1	**RJC931Z**	Terminal Battery, +/−
K 9-2	**RJC511Z**	Terminal Battery, −
K 9-3 [K]	**RKX356Z**	Handle (K)
K 9-3 [S]	**RKX356Z3**	Handle (S)
K 9-4	**RJT1046Z**	Terminal Antenna
•K 10	**RDG5782Y**	Dumper Gear
•K 11	**RYQXC36MQKSN**	Cassette Compartment Ass'y
•K 12	**RDE142X**	Rack
K 13	**XYER3+BG14**	Screw ⊕3×14, Tuning Knob M'tg
K 14	**RDP255Z**	Pointer, Dial
•K 15	**RBT267Z**	Knob, Tuning (K)
•K 16 (Z) (F) [K]	**RYM1XC36LZKS**	Front Cabinet Ass'y (K)
•K 16 (Z) (F) [S]	**RYM1XC36LZK8**	Front Cabinet Ass'y (S)
•K 16 (E) [K]	**RYM1XC36LZEK**	Front Cabinet Ass'y (K) △
•K 16 (I) (G) [K]	**RYM1XC36LZGK**	Front Cabinet Ass'y (K)
•K 16 (I) (G) [S]	**RYM1XC36LZG8**	Front Cabinet Ass'y (S)
K 17	**EAS12P311TB**	Speaker, Woofer
•K 18	**RUB433Z**	R/P Lever
K 19	**RUS664Z**	Spring, Cassette Compartment
K 20	**RDG5840Z**	Drum, Dial
K 21	**XSN26+6**	Screw ⊕2.6×6, Dial Drum M'tg
K 22	**XWA26B**	Washer φ2.6, Dial Drum M'tg
K 23	**XTV3+10G**	Screw ⊕3×10, Mechanism, P.C.B. etc. M'tg
K 24	**XTV3+40G**	Screw ⊕3×40, Cabinet M'tg
K 25 [K]	**RKK244X**	Battery Compartment (K)
K 25 [S]	**RKK244X7**	Battery Compartment (S)
K 26	**RBD398Z**	Knob, Function, Band, FM Mode/B.P. (K)
K 27	**RBN372V**	Knob, Volume, Balance (S)
•K 28	**RJE175Z**	Cord, Speaker
K 29	**XTV3+25G**	Screw ⊕3×25, Speaker Box M'tg
K 31	**RHR171Z**	Bushing (K)
•K 32 [K]	**RKF758X**	Speaker Box, Right (K)
•K 32 [S]	**RKF758X7**	Speaker Box, Right (S)
•K 33 [K]	**RKF758W**	Speaker Box, Left (K)
•K 33 [S]	**RKF758W7**	Speaker Box, Left (S)
K 34	**RGE76X**	Stopper, Right (K)
K 35	**RGE76Y**	Stopper, Left (K)
•K 36 [S]	**RYM2XC36LZK8**	Speaker, Grill Ass'y (S)
•K 36 [K]	**RYM2XC36LZKS**	Speaker Grill Ass'y (K)
K 36-1	**RAFCB2847AB**	Speaker Tweeter
•K 37	**RMP253Z**	Holder, LED
K 38	**RJM164Z**	Built-in Microphone
K 39	**XTV3+8G**	Screw ⊕3×8, Speaker M'tg
K 40	**RJP4G4Y**	Plug (CP1, CP2/4 Pin)
•K 41	**RUP2175Z**	P.C.B. (LED, Battery)
K 43	**QTF1054**	Holder, Fuse △
K 44 (E)	**RGT1215X**	Name Plate
K 44 (I) [K]	**RGT1215Y**	Name Plate
K 44 (I) [S]	**RGT1215Y8**	Name Plate
		ACCESSORIES
•A 1	**RQX4857Z**	Operating Instructions
A 2 (Z) (F) (I) (G)	**RJA20Z**	Power Cord, AC △
A 2 (E)	**RJA86Z**	Power Cord, AC △
		PACKINGS
•P 1	**RPN9525Z**	Pad
•P 2	**RPK2340Z**	Gift Box
P 3	**RPP612Z**	Polyethylene Cover
P 4	**RPH524Z**	Spacer